

# Fundamentals of VSAT Systems & Protocols

Barcelona (Spain) - Le Méridien Barcelona 15 - 19 July 2024



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## Fundamentals of VSAT Systems & Protocols

code: GC28 From: 15 - 19 July 2024 Venue: Barcelona (Spain) - Le Méridien Barcelona Fees: 4700 Pound

#### Introduction

This course covers the Very Small Aperture Terminal VSAT systems. VSAT is growing throughout the world as a way of establishing private satellite communications networks for large organizations that have several widely dispersed locations or providing higher bandwidth for the individual. This course provides the attendees with an indepth background of VSAT techniques as well as a state of the art update on key emerging technologies and future systems.

### Course Objectives of VSAT Systems

- Defining Very Small Aperture Terminals VSAT
- · Understanding VSAT services and features
- Understanding VSAT architecture, system design, and coding schemes
- Stepping through VSAT propagation aspects and antennas
- Understanding VSAT subsystem & launching
- Understanding VSAT link design and analysis
- · Explaining TCP/IP, VoIP and Video applied to VSAT
- Understanding VSAT-base IP communications technologies

### Course Details/Schedule of VSAT Systems

#### Day 1

#### Introduction to VSAT systems and their types

- Satellite Communications Overview
- Common Types of Satellites
- What is a VSAT System?
- How does a VSAT Work?

#### Day 2

#### VSAT services and features

- VSAT Networks
- VSAT Equipment
- VSAT Access Methods
- VSAT Modulation

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#### Day 3

### VSAT propagation aspects

- RF and Microwave applied to VSAT
- Propagation Effects
- Earth Stations
- VSAT Terminals

#### Day 4

#### **VSAT Antennas & Polarization**

- VSAT Antennas
- VSAT Dish Pointing Concepts
- VSAT Footprints
- Polarization

#### Day 5

#### VSAT subsystem & launching

- Fundamentals of VSAT Installation and operation
- The key installation steps
- Troubleshooting and maintenance
- Preventive Maintenance



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